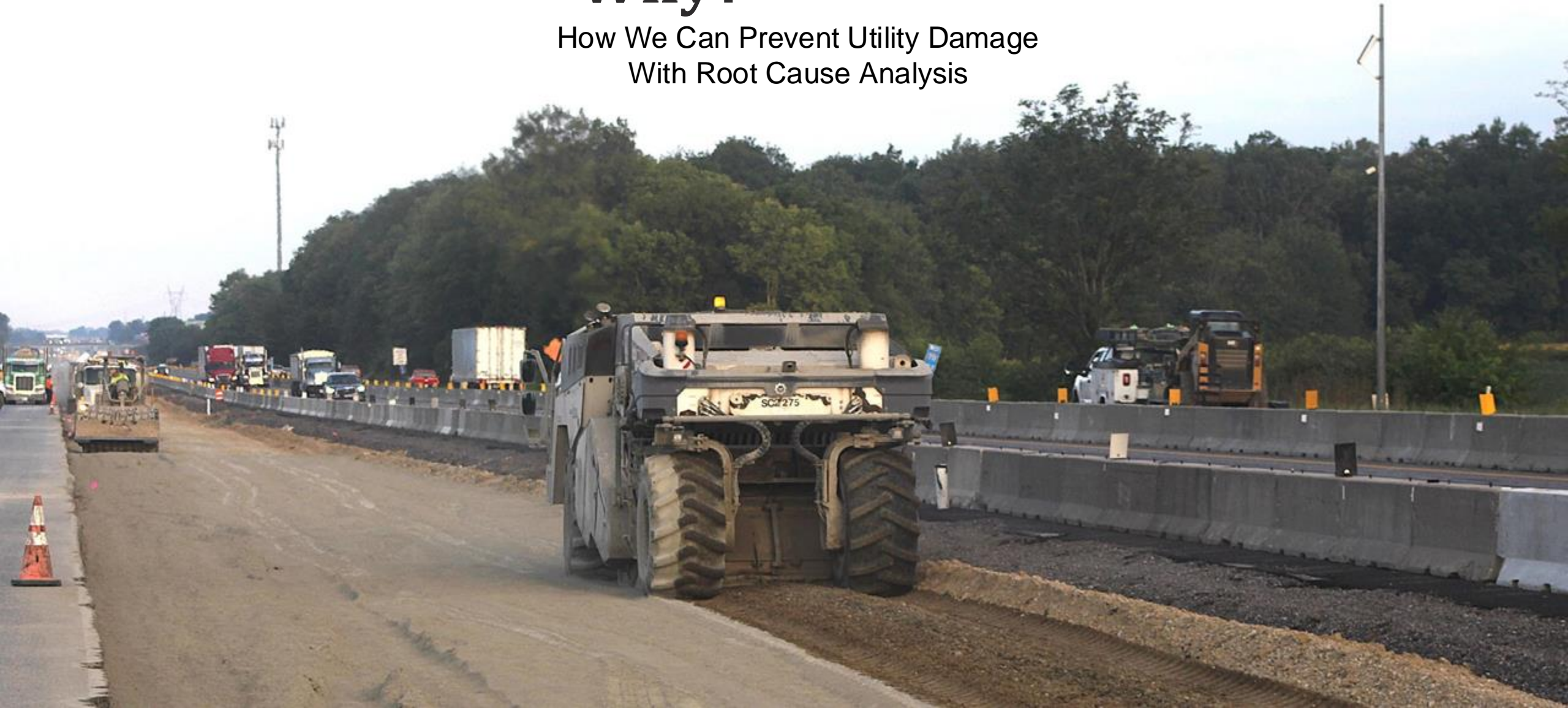


Why Ask Why?

How We Can Prevent Utility Damage
With Root Cause Analysis





Brent Smith

CHST • CIT

- Operator / Foreman – 12 Years
- Regional Safety Manager – 3 Years
- Current Position – Business Development Manager
- Dad of the Year – 7 Years in a Row



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"Excavator dug prior to verifying marks by potholing."

- Is this Root Cause accurate?
- Could you improve your organizations **process** or **performance** based on it?

Traditional View of "Safety"

- As few things going "wrong" as possible.
- Variables cause incidents
- Humans are a liability.



Does the absence of incidents mean you are "Safe"?

Safety-II

- As many things going "right" as possible.
- Understand how work is done.
- Humans can provide solutions.





"Excavator dug prior to verifying marks by potholing."

- Does this Root Cause address Human Performance?
- How can we use it to drive change?

5 Why Analysis

- Developed in the 1920's by **Sakichi Toyoda**.
- Adopted by Toyota Motor Corp to reduce waste.
- Used to understand why new processes were needed.



Key Elements

- Facilitator
- Front Line Employees
- Supervisory Staff
- Management



Key Elements

- Problem Statement
- Root Cause
- Solution
- Corrective Actions



Safety-II

- Involve front line employees.
- Focus on how work done vs imagined.
- Empower employees to be part of the solution.
- Use the 5 Why *Proactively* to find future problems.

"Excavator dug prior to verifying marks by potholing."



Excavator dug prior to verifying marks by potholing.

Why?

A vac trailer wasn't available.

Why?

Not in budget for the job.

Why?

It was an overlooked item.

Why?

No bid review was conducted.

Why?

We do not have a formalized process for bid reviews.

Solutions

A solution is the answer or fix to our determined root cause.

Root Cause: We do not have a formalized process for bid reviews.

Solution: Establish guidelines, criteria, and frequency of bid reviews to ensure employees have resources needed to complete the job safely.

Corrective Action

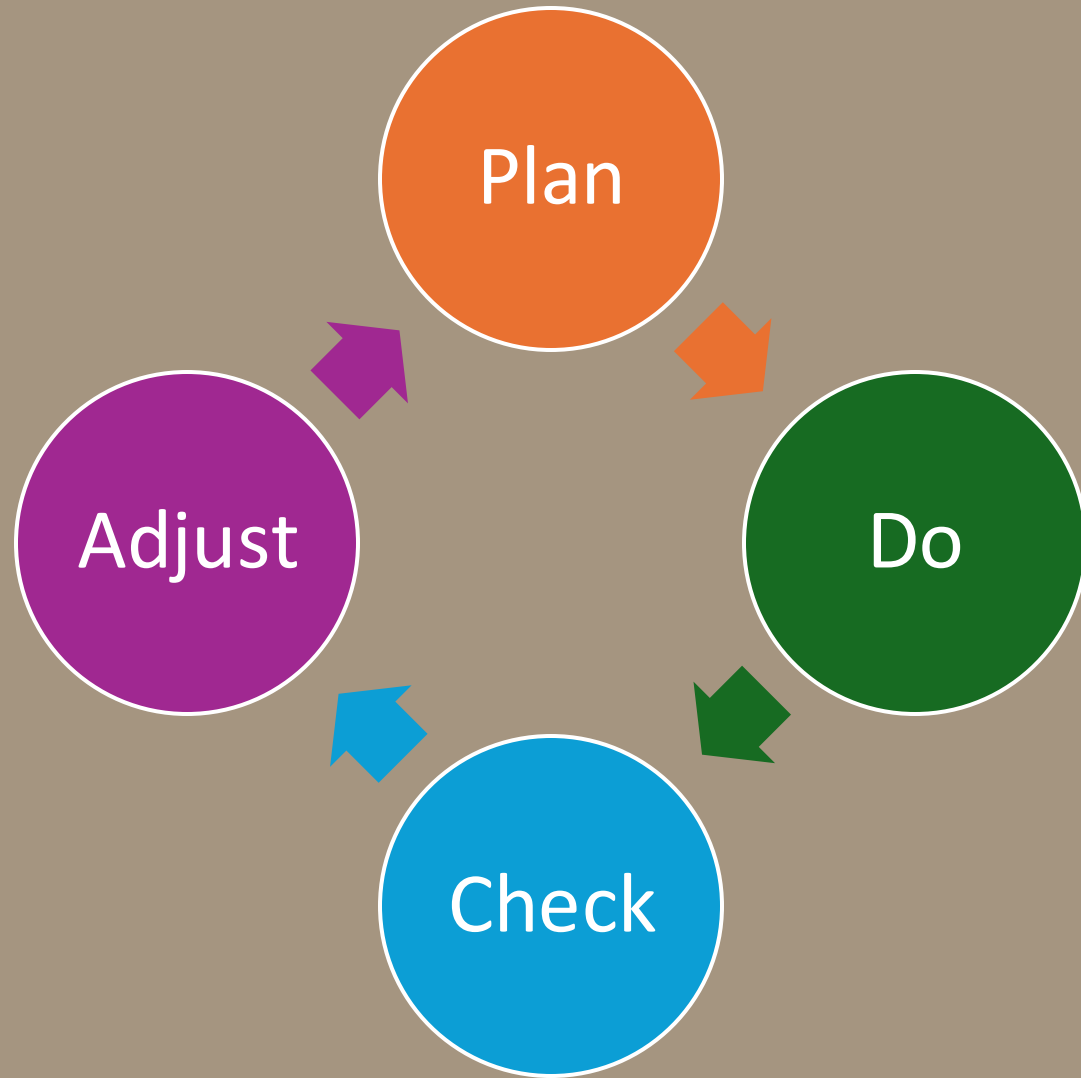
Corrective Actions are the plan to implement solutions.

Root Cause: We do not have a formalized process for bid reviews.

Solution: Establish guidelines, criteria, and frequency of bid reviews to ensure employees have resources needed to complete the job safely.

Corrective Actions

- 1) Vice President will create guidelines, criteria, and frequency for bid reviews.**
- 2) Area Management will schedule bid review meeting prior to submittal.**
- 3) Estimator will present their bids to area management at assigned date.**



Keys to Accountability and Sustainability

- Assign corrective actions to RCA team members.
- Establish an implementation date for each corrective action.
- Use calendars to your advantage...check-in on progress.
- Re-evaluate as needed to ensure corrective action continues to be in line with how work is done, not how it is imagined.

Reference and Influence Material

- *Toyota Production System: Beyond Large-Scale Production* – Taiichi Ohno
- *The Field Guide to Understand 'Human Error'* – Sidney Dekker
- *PeopleWork: The Human Touch in Workplace Safety* – Kevin Burns
- *Human Performance Improvement Handbook* – US Department of Energy